

(8)

STATUS

N E W S L E T T E R

VOLUME 5 · ISSUE 5

MAY · 1986

Telecomputing

Downloading a File
Using AMODEM 7.1 or 7.2

Assembly Language:
Some Advanced Topics

ST in Review:
VIP Professional
Zoomracks
King's Quest II

Assembly
Downloading

ATARIWRITER+ and The SG10

Rediscovering Diskeeper

S.T.A.T.U.S.-OFFICERS

PRESIDENT

GENE RODRIGUEZ.....499-6021

VICE PRESIDENT

STAN HARRISON.....497-4369

TREASURER

J. C. PETTY.....463-6904

SECRETARY

DICK LITCHFIELD.....468-6964

PROG. COORDINATOR

BUCK MADDREY.....464-2100

LIBRARIAN

DAVID HOWELL.....468-3433

MEMBERSHIP CHAIRMAN

BILL WRIGHT.....481-0555

SYSOP

DOUG BOYNTON.....468-6242

EDITOR

GENE RODRIGUEZ III.....490-2951

=====

S.T.A.T.U.S. BBS
300/1200
804-468-1096

Editor's File

All right! That's IT! In case you haven't noticed (and maybe you not the type that does) I've changed the font used to print this Newsletter THREE times in the last FOUR issues! Now that you've had a chance to sample the four entries it's time for you to speak out... let your preference be known. I'll give it a few months for input to trickle in (I know you'll all use your fastest carrier snails) then I'll stick with the most popular.

Until I get the urge to change it again...

We've got a new printer. Jim Blain (brother of member and technophile Randy) has arranged for the company he works for to print, collate and staple the little buggers for us (a not unformidable task). This not only is a cost saving move, but a labor saving one: previously, yours truly did the lions share of that work. Thanks Jim, and dear reader please check out the ad inside.

It seems that the wonderful, wacky STs are gaining a little more momentum going into the Spring/Summer months: ATARI has announced that the little 512K/1024K marvels are going to have at their disposal IBM compatibility (Like telling a

right-handed ST to eat with its left hand) and Macintosh compatibility (Like telling a right-handed ST it's alright to eat with its right hand, just don't enjoy it) available by the time you read this.

Quite a few offerings in the ol' Newsletter this month: Doug "Don't Stop Me, I'm On A Roll" Boynton continues to amaze us with his wit and insight in "Telecomputing", Bob & Bobby Prince offer some tips on how to Download with AMODEM 7.x, Scott Mathews digs deep and comes up with an oldy but goody, and as if that weren't enough, Chris Crawford ends his series on Assembly Language with lesson eight (which means you're going to have to help fill the void!)

To conclude this month, I'd like to extend a special Thank You to Willie Niepraschk. Willie went and got a 520ST and was so overwhelmed by the whole thing that he was moved to words several reviews worth, in fact.

You've earned your gold star for the month Willie...



Telecomputing

By Doug Boynton

A grab-bag of stuff this month, including the answers to a few questions I've gotten lately.

Dead time on the system
...is still dead time,
whether at 300 or 1200
baud...

The move is on in earnest to 1200-baud for hobby-type computing. More and more businesses are making the switch to 2400-baud, and as that happens, the price of 1200-baud modems is dropping like a rock. I stick by my 1985 prediction of an under \$100, 1200-baud modem by the end of the year.

There are some things to keep in mind if you're planning the quantum leap to 1200-baud telecomputing.

1200-baud transmissions are more prone to errors because of line noise. The snaps, crackles, and pops of telephone circuits (not to mention hum, hiss and echoes) can play havoc with 1200-baud communications. AT&T isn't fibbing when they tell you their line quality is better. My luck with SPRINT and MCI hasn't been too good, especially when calling westcoast boards. I choose to pay a few cents more per minute, and avoid a lot of frustration by making the "right choice" for

long-distance telecomputing. A little hiss is okay when I'm calling Mom...but drives me batty when I'm trying to get that new RAMDISK program from the west coast.

CompuServe's rates for 1200-baud connections is roughly twice that of 300-baud. Let's do some figuring. Twice the price at four times the speed. Not too shabby, but keep in mind a couple of things. Dead time on the system (because it's overloaded most of the time) is still dead time...whether at 300-baud, or 1200. So figure (roughly) three times the speed, once you take those long (long...) pauses into account.

You'll do well to plan your time wisely on CIS (or the other time-sharing systems). Plan ahead on where you want to go, and what you want to do when you get there. Staring at a lot of menus costs a lot at 1200-baud. Better do your browsing at 300; and your downloading at 1200.

Speaking of downloading, you'll pick up some time if you download from CIS or GENIE to a RAMDISK instead of a real, live drive. The mechanics of writing what you're downloading to the disk takes time... time you're paying for. The RAMDISK is quicker, but don't forget to transfer the files to a real disk before you power down the computer!

Finally...while we're on the subject of 1200-baud modems, here's a tip or two if you're shopping. You will need an 850 interface if you're stepping up to 1200...or one of the other "R:" device hardware items ("R-verter", "P:R: Connection") to connect to your computer.

Also, the term "Hayes Compatible" means different things to different advertisers. Read the fine print, and call 'em if you have to...to ask, "how compatible is it?"

"Accepts Hayes Dialing Commands" means you can dial from the keyboard (or your program) using the "ATDT" commands. This is probably good enough for most applications. I haven't heard of any serious problems with the AVATEX modems. AVATEX fits this category. You should know, though, that the AVATEX does not accept the full Hayes command set. This may disappoint you somewhere down the road.

For what it's worth, Keith Ledbetter ("1030 Express", "850 Express") recommends the SmarTeam modem as a very good substitute for the Hayes. He says he hasn't found anything the Hayes can do that the SmarTeam can't. By the way, you'll want to pick up a copy of "850 Express" if you're buying a Hayes-type modem. You'll be in Fat City.

OTHER ITEMS: GENie time is free if you're Uploading. This offer has been extended through April.

Compuserve's Data Library (DL) sections are picking up some speed, but the rest of the system continues to be slower than molasses. STAY OFF from roughly 8PM to 1AM if you want the most for your money. C'mon, Columbus, anybody home up there? Let's get on the stick!

007's "Downunder" section appears to be having some growing pains. I'm not a 'member', but have noticed a fair number of bulletins pertaining to expansions, changes, and downtime in this section of the BBS.

If you haven't been up on NORTH END in the past month or so, don't be surprised if it doesn't recognize your password. Tom Dekker had a massive disk crash recently, and is building the password file back up from scratch.

Summertime...and expect the adolescent systems to begin sprouting like weeds. A tip to would-be BBS'ers...don't put your message or password files on RAMDISK...you're asking for trouble!

Well, my fingers are nubs for this month. If you've got a minute or two over the next month, drop me a line or two on the BBS

concerning your thoughts on
FREWARE, or "Software on the Honor
System".

Keep those NAK's to a minimum.

NEXT TIME: "FREWARE - SPITTING
INTO THE WIND?"

Downloading a File Using AMODEM 7.1 or 7.2 by Bob & Bobby Prince

One of the most popular uses of
a modem is downloading files from a
local BBS. There are literally
hundreds of public domain programs
and information files available
from such bulletin boards as OOT,
TEMPLE, and our own STATUS. These
programs are inaccessible, however,
if you can't figure out how to
download them.

Our first experience
was one of frustration
and puzzlement...

There are two separate methods
of downloading files. The first,
and the fastest, is the capture
file method. This method does not
allow any verification of the data
being transmitted over the phone
line and should only be used for
text files. The second method is
called the X-MODEM protocol and is
the best method to use for down-
loading programs that will be run
on your ATARI. Each file is
separated into blocks of 125
bytes. After each block is sent
to your computer, your computer

sends a checksum code, which is
compared with other computer's
code. If they don't match, the
block is sent again until recep-
tion is verified; if after ten
tries reception can't be
confirmed, transmission is
aborted.

To download a file, follow
these steps:

1. Choose a file to download.

a. Usually a "D" or "*" will
cause the "FILENAME->" prompt to
appear.

b. Type the exact filename
you wish to receive. On all local
BBS's the filename is up to 8
characters with no extender.

c. Hit "RETURN"

d. The BBS will prompt
"USING X-MODEM PROTOCOL?"

e. Type "Y" for programs,
"N" for text. You can use X-MODEM
for all files.

2. If you're using X-MODEM:

a. After a short pause, the
BBS will prompt: "READY X-MODEM".

b. Critical-Hit SELECT to
return to AMODEM menu.

c. Hit "R" to receive
X-MODEM.

d. Answer prompt for

filename (see note below) with any legal 11 character filename.

e. Hit "RETURN"

f. When your BBS screen appears again, hit "START" and wait.

NOTE: Sometimes before the prompt for the filename in 2.d. above you'll see a prompt "OKAY TO CLEAR BUFFER?". This will occur whenever there is data in the buffer. Answering "Y" will allow you to proceed to the filename prompt in 2.d. Answering "N" will delete the "R" command and allow you to dump the buffer before proceeding to 2.c. again.

3. If you're capturing a file:

a. One of two things will happen:

1. The BBS will start immediate transmission, or
2. You'll receive some prompts that will give time for an orderly capture.

b. If number two, follow steps 2.b. to 2.f...except in 2.c. hit "C" for capture instead of "R" for receive and in 2.f. hit "OPTION" and then hit any key to begin the transfer. When the transfer is complete, push "SELECT" & "D" to dump the remainder of the buffer.

c. If number 1, you can just hit "OPTION" to capture into the buffer or abort the transfer. If

you hit "OPTION" the file will load into the buffer, and, when it's full, will ask you where to dump it. Just follow the prompts.

Our first experience with a modem was one of frustration and puzzlement. We were finally bailed out by Doug Boynton, your friendly STATUS Sysop. We hope this little primer is of some help to you in your telecomputing exploits.

Assembly Language Course Lesson Eight Some Advanced Topics

We have covered all of the traditional material associated with 6502 assembly language programming. However, there remain a number of topics that should be addressed before we finish. They are not closely associated with each other, so I will take them in random order.

...it seems natural enough, but it IS something of a mess...

The first topic is perhaps the most difficult one for a beginning assembly-language programmer: Where do I begin? How do I put together an entire assembly language project?

The problem here is seldom a technical one. Most beginners are stopped by their own lack of goals

rather than any lack of technical expertise. One does not just write an assembly language program because one knows assembly language -- that is putting the cart before the horse. One starts with goals and then considers means.

A story from my early days with micros will expressed in two words: features and compatibility. The designers of the Sixes were always adding new features to the microprocessors with each successive generation. The goal seemed to be to pack as many bells and whistles in as would fit. The second goal, compatibility, meant compatibility with the previous microprocessor in the series. This insured that software developed for previous versions would still run on the newer versions.

The result of this design philosophy was a series of powerful microprocessors that were quite complex in layout and rather difficult to learn. The features were piled up on each other in a bewildering array. Once you learn the system, it seems natural enough. But it is something of a mess.

The Sixes include the 8800, the 8502, the 6809, and the 68000. The two key words guiding the design of the Sixes are cleanliness and speed. The idea was to make the instruction sets clean, powerful, and fast. The hope was that the processors would be so

easy to learn that compatibility would not be a problem. The design approach was to use just a few simple instructions, but give them variations that greatly extend their power. Thus, the 6502 has a LDA instruction that can be used with a great many addressing modes.

The 68000 is the 32-bit entry into the Sixes line. It carries the idea of cleanliness even further than the 6502. The 68000 uses a single instruction with different modes to replace the 6502 instructions LDA, LDX, LDV, STA, STX, STY, TXA, TAX, TYA, PHA and PLA. That's quite a simplification!

The 68000 also boasts sixteen registers, each 32 bits wide. That's a total of 512 bits of register space, the 6502 has 32 bits of equivalent register space. Those sixteen registers eliminate many of the data-shuffling problems so common with the 6502.

The 68000 has a linear address space 24 bits wide -- that's sixteen megabytes! Thus, a 68000 can directly address 16 megabytes of RAM and ROM. The 6502, by contrast, can only address 64K directly -- it must use paging systems that slow it down to address more memory.

Finally, the 68000 has a number of advanced capabilities that make possible a number of special capabilities. I will

describe just one stack frames. The 68000 makes it easy to set up a local, temporary stack when you enter a subroutine. Thus, subroutines can have their own local variables stored on the stack, accessed via a special stack pointer register. The 68000 will manage all the housekeeping necessary to keep such a system straight.

Did I mention that 68000 has hardware multiply/divide?

***** THE END *****

ST in Review

BY Willie Niepraschk

VIP Professional

by VIP Technologies Corporation

This program acts and looks like LOTUS 1-2-3 (tm) another electronic spreadsheet program popular on the IBM PC computer system.

While the documentation talks about the program using GEM, it was quickly discovered that the version currently sold does not support GEM. I wrote the company and was informed that they would ship the GEM version to all customers free of charge as soon as it becomes available.

This program performs very well and the GEM version when available may turn this product into one of the top programs for the ST. The version I had purchas-

ed contained a few bug and I was informed by the company that they had been corrected. Scrolling the screen was slower than on the IBM PC since the IBM had to move only 1920 character while the ST had to move 32K of memory.

The only thing that will keep this program from selling well is it's high price.

Zoomracks

PUBLISHED BY QUICKVIEW SYSTEMS

What is ZOOMRACKS? ZOOMRACKS is a program that helps you to organize information stored in the computer as notes.

Just as LOTUS 1-2-3 (TM) is a spreadsheet program for financial applications, ZOOMRACKS is a spreadsheet program for storing information. ZOOMRACKS can be compared to a library where each book represents some information that is stored away on a shelf.

What can ZOOMRACKS be used for? According to the company it can be used as a mailing list, appointment book, billing information, inventory management, payroll records, recipes and many more applications. This program has no math functions and it is my opinion that this program needs to receive information from other sources like electronic spreadsheet or databases. This program should be improved to make it easier to accept data from other sources or better yet have

(804) 499-5057



Cavalier

Printing and Rubber Stamp

- COMPLETE ART DEPARTMENT
 - PHOTO-TYPESETTING
 - DESIGN CAPABILITIES
- COMPLETE PRINTING SERVICE
 - LETTERPRESS
 - NUMBERING
 - EMBOSSING
 - RUBBER STAMPS
 - MAILING SERVICES

PICK UP AND DELIVERY SERVICES

248 Jersey Avenue • Virginia Beach, VA 23462

an electronic spreadsheet built in.

The program seems to be well written and designed, but it does not use the full power of the ST computer. This program would be greatly improved if it would make use of the GEM interface rather than the ALT-KEY and function key combinations. It takes hours of practice before this program becomes user friendly to use. I was informed by Quickview to expect a GEM version around June. There may also be some math functions in future releases.

The company seems to be determined to make users happy so upgrading your software should not be a major problem. While I will probably stick with electronic spreadsheets and data base programs, I believe there is a great future for programs like ZOOMRACKS and I know of at least one customer that has put the program to great use.

Kings Quest II

by SIERRA on LINE

This graphics adventure game is very addictive. The graphics in this program really show off the powers of the ST computers.

In this program you, a prince, are sent to rescue a princess. This is not an easy program for a beginning adventurer like myself and I have not yet been able to locate the key that

will open the door.

This program has a Little Red Riding Hood, Grandma, a Dwarf, a Witch, a Batmobile (?), a Wizard and other characters. You may use the keyboard or a joystick to move the character from screen to screen, finding treasures and clues along the way. This program plays well and no problems were ever encountered. I wish this program would come with a hint book so that I could continue my quest.

Well, I guess I better get back to my game.

ATARIWRITER+ Printer Driver for The SG10

Bill Zinn

Abacus Newsletter March 1986

Those of us with the Star SG10 printer have had some problems with the printer driver editor built in to the otherwise excellent ATW+. Thanks to John Skruch, Manager of XE Software at ATARI, here are the codes for a working SG10 driver. It was developed by Eric Ginner also of ATARI. John assures me that it produces 2 col. text if sufficient memory remains for the computer to format text just before printing. The only problem: expanded condensed text will not print in Col. 1.

Because, Mr. Ginner's driver does not permit mixing NLQ and

proportional fonts with other fonts in the same file, I have included an alternate set of codes for setting up the fonts in the driver editor. I have not had time to test either set on the 130XE to verify that they permit 2 column printing.

NOTE: SELECT and UP or DOWN ARROWS do not work for superscript and subscripts. Control G codes are required. Also, when changing fonts within the file a <CTRL> G 1 should always be used to turn off super/Subscripts, italics, double strike, (and Prop. if using my alternate codes) before selecting another font.

Codes to Enter for Editor Prompts:

Initialize Every Line	blank
Line feed & CR	155
Underline off	27 45 0
Underline on	27 45 1
Backspace	8
Elongated off	27 87 0
Elongated on	27 87 1
Bold off	27 70
Bold on	27 69
Up 1/2 line	blank
Down 1/2 line	blank
Down 1/2 line & CR	blank
Return w/o LF	155

The following alternate font codes turn off prop. with <CTRL> G1 and turn off NLQ whenever any of the other fonts are selected.

Font #1 Pica	27 84
27 53 27 72 27 112 0 18	
Font #2 Condensed	27 66 5
27 66 3	

Font #3 Proportional	27 66 5
27 112 1	
Font #4 Superscript	27 66 5
27 83 0	
Font #5 Subscript	27 66 5
27 83 1	
Font #6 Elite	27 66 5
27 66 2	
Font #7 Italics	27 66 5
27 52	
Font #8 Double Strike	27 66 5
27 71	
Font #9 NLQ	27 66 4

"Re-DISKovering" Diskeepr

by Scott Mathews

Do you ever hear or read about programs for your Atari and think to yourself: "Geez, that sounds like a great idea...I'll have to check that program out one of these days."? So it is with me... I'd heard and read about a variety of data base management utility programs yet had never gotten around to getting my hands on them and using them.

One day, I discovered I wasted a lot of time digging through my disk carriers looking for that one peculiar little program I had somehow lost track of. The light dawned, and I turned my attention to data base management. It was then that I discovered Diskeeper, by Ken Romig and Dean Dusenbery, produced by Royal Software in 1984.

Diskeeper is certainly not new to most "high class" Atari

hackers. But, since I don't consider myself a part of this esteemed group, DK was a great discovery, and I quickly began using it. I must confess it was a welcome discovery, for Diskeeper has cleaned up my life and made my absent-mindedness almost a thing of the past.

Being a "low class" hacker, I needed to be introduced to the awesome world of DBM without too much "muss or fuss". In short, I needed a program that was incredibly simple to use. From square one, Diskeeper filled the bill! Upon booting, DK supplies a neat, easy-to-understand menu. The menu tactfully avoids any "fancy smantzy" graphics or icons and doesn't try to overwhelm the user with hi-tech linguistics.

From the menu, you follow directions in a clear cut, straightforward step-by-step fashion. Once you've initialized a disk for your files, you simply begin feeding your drive disks. Diskeeper has room for 999 records. Each program on a disk is "munched" or read into memory and can be saved upon completion of feeding. All of the above may seem fairly typical of your average, run of the mill DBM program, but, as I discovered later by comparison, Diskeeper makes all these logistics a breeze.

Most DBM programs offer many special features, and DK is certainly no exception. I won't

bother to go into all the details, but two features I found unique were a titling format and printer controls. With DK, you can title each program as its being read into memory. A list of various kinds of programs comes built into Diskeeper. And, once you've sorted all those files, you have two special printer modes -- you can simply print out a list of the sorted programs, or (Eureka!!) you can create customized labels for your disks. Not only do you get an organized hardcopy of every program you own, but a neat disk label to cover all your sloppily written disk labels! Who could ask for anything more??

Diskeeper was a truly valuable discovery for me. It is an easy, effective data base management utility for the "low class" Atari hacker. All you "high class" hackers may have moved on to more sophisticated DBMs. I, for one, consider Diskeeper a classic and would highly recommend it to anyone. Some of you "high classers" may want to "rediscover" it for yourselves.

ELAPSED SECONDS TIMER

10 POKE 18,0:POKE 19,0:POKE 20,0
20 TIMER=INT((PEEK(18)*65536+PEEK
(19)*256+PEEK(20))/60+0.5
30 POS.0,0:PRINT TIMER:GOTO 20

President's Column

Happy Birthday to us.....

OUR group was 5 years old, last month, and we are still going strong. WE look forward to continuing our support to the Atari User here in the Southside Tidewater area, and I would like to thank those of you who have kept us going...

Kent Irwin of Interface tells me that he is planning on going on-line with the first ST BBS in the Tidewater area, (804) 857-4916. The only snag he has right now is that the 520 ST (1 meg), he has is his demo machine. He is waiting for the 1040ST to arrive to take it's place... It seems his supplier can't come up with the 1040. Are they hard to find, or what? He could have sold quite a few by now, as we have several people waiting to up-grade...

On the What's New front...A MACintosh emulator ROM for the (1 meg) machines, and an IBM emulator, which was introduced at the COMDEX show in Atlanta...

Activision Inc., will become the new owner of Infocom Inc., maybe these two will produce better software for us all, The word is that Infocom will continue producing those text adventures they are famous for...

This month we have for you Atariwriter+ owners a Printer Driver Format for the SG10, by Bill Zinn of Abacus UG.(works good with the 10X) If you have worked one up for your particular brand of printer, let us know, so that we can put it in print... We also have a couple of reviews from Wilford Niepraschk a new 520ST owner and former Apple user...

And before I go... A big welcome to all of our new members....

Keep On Hacking...

To create a RUN-only file, add the following line:

```
32767 POKE PEEK(138)+256*PEEK(139)
      +2,0:SAVE "D:filename.ext"
      :NEW
```

Type GOTO 32767, resulting file can only be RUN, but not LISTED. Be sure you save a listable copy.

E

S.T.A.T.U.S.

Opinions expressed in this publication are those of the individual authors and do not necessarily express or reflect the opinions of the Southside Tidewater Atari Technical Users Society. Some of the material contained herein may have been taken from bulletin boards and newsletters of other groups and should not necessarily be construed as fact.

The material herein may be copied freely provided that full credit is given to the original author and the Southside Tidewater Atari Technical Users Society. S.T.A.T.U.S. is not affiliated with Atari Inc.

Please address all newsletter correspondence to:

S.T.A.T.U.S.
Newsletter Exchange
4836 Honeygrove Rd.
Va. Bch., VA 23455
(804)499-6021

MEETINGS: S.T.A.T.U.S. meetings are held on the first and third Monday of each month at the Baylake Pines Private School, 2204 Treasure Island Dr., in Virginia Beach. at 6:30 p.m. All interested parties are welcome to attend.

NEWSLETTER ARTICLES:

Submitted articles are preferred on disk text files, but will be greatfully accepted on hard copy (including handwriting) if you do not have a disc drive. If you have a modem, you can upload your articles to the Editor by calling 499-6021. Articles may be submitted anytime, but will probably not make that month's newsletter if submitted less than one week before the regular meeting date.

=====

S.T.A.T.U.S. BBS
804-468-1096

S.I.A.I.U.S
Newsletter Exchange
C/O Gene Rodriguez
4836 HONEYGROVE RD.
Virginia Beach, VA 23455

First Class Mail